

## NOTICES OF FINAL RULEMAKING

The Administrative Procedure Act requires the publication of the final rules of the state's agencies. Final rules are those which have appeared in the *Register* first as proposed rules and have been through the formal rulemaking process including approval by the Governor's Regulatory Review Council or the Attorney General. The Secretary of State shall publish the notice along with the Preamble and the full text in the next available issue of the *Register* after the final rules have been submitted for filing and publication.

### NOTICE OF FINAL RULEMAKING

#### TITLE 18. ENVIRONMENTAL QUALITY

#### CHAPTER 2. DEPARTMENT OF ENVIRONMENTAL QUALITY AIR POLLUTION CONTROL

#### PREAMBLE

- 1. Sections Affected**

R18-2-101	<b><u>Rulemaking Action</u></b>
Article 16	Amend
R18-2-1601	New Article
R18-2-1602	New Section
R18-2-1603	New Section
R18-2-1604	New Section
R18-2-1605	New Section
R18-2-1606	New Section
- 2. The statutory authority for the rulemaking, including both the authorizing statute (general) and the statutes the rules are implementing (specific):**

Authorizing statutes: A.R.S. §§ 49-104(A)(11) and 49-425  
Implementing statutes: A.R.S. §§ 49-414 and 49-414.01
- 3. The effective date of the rules:**

December 2, 2003
- 4. A list of all previous notices appearing in the Register addressing the final rules:**

Notice of Rulemaking Docket Opening: 9 A.A.R. 390, February 7, 2003  
Notice of Proposed Rulemaking: 9 A.A.R. 763, March 7, 2003
- 5. The name and address of agency personnel with whom persons may communicate regarding the rulemaking:**

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- 6. An explanation of the rules, including the agency's reasons for initiating the rules:**

**Summary.** This rule sets forth the process Arizona Department of Environmental Quality (ADEQ) will use to determine whether Best Available Retrofit Technology (BART) will be required for sources determined to be contributing to visibility impairment in a mandatory Federal Class I area. Federal regulations allow Federal Land Managers (FLMs) to certify sources defined in 40 CFR 51.301 as potential contributors to visibility impairment in any of the Arizona mandatory Federal Class I areas under Section 169A of the Clean Air Act (CAA).

**Background.** In 1977 Congress added a new section to the Clean Air Act - Section 169A, Visibility Protection for Federal Class I Areas - which established a national goal for, "the prevention of any future, and the remedying of any existing impairment of visibility in mandatory class I Federal areas which impairment results from man-made air pollution." In addition, the section required states to submit state implementation plans (SIPs) requiring best available retrofit technology (BART) for certain existing stationary sources found to cause or contribute to visibility impair-

**Notices of Final Rulemaking**

ment. On November 30, 1979, EPA promulgated a list of mandatory Federal Class I Areas (Class I areas) where visibility is an important value (44 FR 69122). There are 12 Class I areas identified in Arizona: Chiricahua National Monument Wilderness, Chiricahua Wilderness, Galiuro Wilderness, Grand Canyon National Park, Mazatzal Wilderness, Mount Baldy Wilderness, Petrified Forest National Park, Pine Mountain Wilderness, Saguaro Wilderness, Sierra Ancha Wilderness, Superstition Wilderness, and Sycamore Canyon Wilderness (40 CFR 81.403).

On December 2, 1980 (45 FR 80084), EPA defined the role of the FLMs in certifying visibility impairment in the mandatory Federal Class I areas. On November 24, 1987 (52 FR 45132), FLMs identified Petrified Forest National Park, Saguaro Wilderness, and Grand Canyon National Park, as having visibility impairment possibly attributable to stationary sources. Under the 1980 rule, if found to cause or contribute to the impairment, certain existing stationary sources operating in or near the identified Class I areas could be subject to BART (A list of sources eligible for the possible application of BART can be found at 40 CFR 51.301). On October 3, 1991, the Navajo Generating Station (NGS) was found by EPA to be causing or contributing to visibility impairment for the Grand Canyon National Park and eligible for BART (56 FR 50172). BART control analyses were subsequently performed by EPA, and other parties through related court actions. Under the 1980 rule, the federal expectation is that actions for determination of possible source attribution will be performed by the states. Therefore, Arizona needs to be prepared to proceed with an attribution analysis and assessment for the application of controls upon any determination of a BART eligible source being the possible cause or contributor to visibility impairment in a Class I area. This rule addresses that need.

Current Conditions. ADEQ has determined that this rule applies to any source in existing stationary source categories identified in 40 CFR 51.301 that are operating in or near the mandatory federal Class I areas in Arizona. The source is an existing stationary facility that includes any reconstructed source that was not in operation prior to August 7, 1962, and was in existence on August 7, 1977, and has the potential to emit 250 tons per year of any regulated pollutant. ADEQ estimates that there are potentially 10 such sources within Arizona. "In existence" is interpreted by EPA to be consistent with the term, "commence construction" found in Prevention of Serious Deterioration (PSD) regulations (40 CFR 51.165(a)(1)(xvi) and 40 CFR 52.21(b)(9)). If construction commenced after August 7, 1977, the source would be subject to the PSD/NSR (new source review) program (the state regulations are found at 18 A.C.C. 2, Article 4). However, EPA also notes "that sources, are not BART eligible if the only change at the plant was the addition of pollution controls. For example, if the only change at a copper smelter during the 1962 through 1977 time period was the addition of acid plants for the reduction of SO<sub>2</sub> emissions, these emission controls would not themselves trigger a BART review."<sup>1</sup>

[<sup>1</sup>EPA proposed rule, 66 Federal Register 38119, July 20, 2001.]

Under this rule, ADEQ, when analyzing an attributable source for BART controls, must consider several factors including, for example, costs, remaining useful life of the source, and degree of improvement anticipated to result from the application of the controls (the factors are detailed in R18-2-1605). Sources required by ADEQ to install and operate BART controls have a final opportunity to request exemption from the requirement prior to the application of controls. This opportunity for a federal exemption from BART, is contained in R18-2-1606, and 40 CFR 51.303.

Summary. This rule outlines the process through which sources eligible for the application of BART will proceed if certified by the state of Arizona or an FLM as possibly causing or contributing to visibility impairment due to attribution. If found to be attributable for the impairment, a BART analysis will be performed to determine the level of controls necessary to remedy the impairment. This rule enables Arizona to fulfill the requirements of the Clean Air Act and the goal of section 169A of the Act to return the Nation's federal parks and wilderness areas to natural conditions.

**Section-by-Section Explanation for the Rules**

- R18-2-1601      This Section lists the definitions that apply to this rule.
- R18-2-1602      This Section lists the Class I areas addressed by this rule for the applicable existing stationary facilities, as defined in R18-2-1601(2).
- R18-2-1603      This Section establishes the procedure for certification of impairment by either a Federal Land Manager with authority over a mandatory Federal Class I area, or the Director, should either believe there exists reasonably attributable visibility impairment in a Federal Class I area as listed in R18-2-1602.
- R18-2-1604      This Section establishes the procedure for an attribution analysis after certification of a source or group of sources as outlined in R18-2-1603. Upon completion of the attribution analysis, the procedure for the Director to issue draft and final attribution findings is outlined in R18-2-1604(C).
- R18-2-1605      This Section establishes the best available retrofit technology (BART) analysis procedure after a source is identified under R18-2-1604. Upon completion of the BART analysis, the procedure for the Director to issue draft and final BART findings, including alternatives to emission standards, is outlined in R18-2-1605(B) and (C), respectively. The specific conditions where BART would be satisfied due to past or planned actions by the facility are outlined in R18-2-1605(D). EPA determinations regarding new technology that might require a BART analysis

Notices of Final Rulemaking

for an applicable source, regardless of a source or small group of sources previously being certified and found attributable, are covered in R18-2-1605(E).

R18-2-1606

This Section establishes the procedures for obtaining a federal exemption from a BART requirement.

**7. A reference to any study relevant to the rules that the agency reviewed and either relied on in its evaluation of or justification for the rules or did not rely on in its evaluation of or justification for the rules, where the public may obtain or review each study, all data underlying each study, and any analysis of each study and other supporting material:**

None

**8. A showing of good cause why the rules are necessary to promote a statewide interest if the rules will diminish a previous grant of authority of a political subdivision of this state:**

Not applicable

**9. The summary of the economic, small business, and consumer impact:**

**A. Rule Identification**

These rules amend R18-2-101 (“visibility impairment” definition) and add new Sections R18-2-1601 through R18-2-1606. For sources under ADEQ jurisdiction, the rules take the place of federal regulations that currently govern this area.

**B. Entities Directly Impacted**

1. Federal Land Managers. R18-2-1603 allows Federal Land Managers (FLMs) to certify visibility impairment in mandatory Class I areas. This was already allowed by federal rule. Under R18-2-1601 of the rule, the FLMs able to certify impairment in Arizona are with the United States Forest Service and the National Park Service. There are no FLMs in Arizona from the United States Fish and Wildlife Service, because this agency does not have jurisdiction over any of Arizona’s mandatory federal Class I areas.

2. ADEQ. R18-2-1604 requires ADEQ to identify stationary sources that could cause or contribute to the certified visibility impairment. Prior to this rule, this function was carried out by EPA. R18-2-1605 would require ADEQ to analyze for BART (best available retrofit technology) controls those sources identified as causing or contributing to visibility impairment. Prior to this rule, this function was carried out by EPA. The impact of this rule on ADEQ will primarily be on the Air Quality Division, Permits and Assessment sections, with a corresponding reduction of impact on EPA.

3. Stationary sources. R18-2-1605 also requires stationary sources identified in #2 to install or operate the BART as determined by the Director. Prior to this rule, only EPA determined and required BART. To determine impacted stationary sources, ADEQ staff reviewed Title V permits from ADEQ’s Air Permit files. Of the 26 industry categories listed in 40 CFR 51.301, only five categories were found to exist under ADEQ’s jurisdiction: steam electric plants, cement plants, primary copper smelters, lime plants, and industries using non-utility boilers. As a result, potentially 10 sources, representing 16 BART eligible units (boilers and kilns), could be affected by this rule. The combined potential to emit from these sources totaled 94,287 tons per year for NO<sub>x</sub>, 141,036 tons per year for SO<sub>2</sub>, and 12,146 tons per year for PM. The combined potential to emit for all pollutants for these 10 sources total approximately 250,000 tons per year.

**C. Probable Costs and Benefits Associated with the BART/Visibility Impairment Process**

1. Direct Costs - FLMs: FLM activities to certify visibility impairment in mandatory Class I areas may involve preparation and analysis of monitoring data, emission inventories, meteorological records, etc. ADEQ estimates that this cost per certification could be as much as \$50,000 if extensive analysis is conducted. These costs exist whether or not these rules became final.

2. Direct Costs - ADEQ: ADEQ costs related to identifying whether a BART eligible stationary source causes or contributes to visibility impairment in Class I areas are based on the activities identified in R18-2-1604(A). ADEQ estimates that these costs could range from \$100,000 – 200,000 per attribution analysis, and be primarily borne by the ADEQ’s Air Quality Assessment Section. Costs related to analyzing identified sources for BART are based on the activities identified in R18-2-1605(A) and will be moderate, but less expensive than the attribution analysis. These costs will be primarily borne by ADEQ’s Permits Section. These costs will accrue to the state. Finally, incorporating BART into an existing state air quality permit may require additional resources from the Permits Section. However, these costs, unlike costs for the attribution and BART analysis, would be covered by permit revision fees paid by the source, and would have existed whether or not these rules became final.

3. Direct Costs - Stationary sources: If a source or small group of sources is found to cause or contribute to visibility impairment, and the BART determination requires installation of retrofit controls, the costs to sources required to install BART will be substantial. The total cost to install a technology similar to BART at the Navajo Generating Station was estimated by SRP to be in the hundreds of millions of dollars (51 Federal Register 50172, October 3, 1991). However, the example of the Navajo Generating Station shows costs to install technology similar to BART can result even where there is no state rule. According to EPA, “Where a State defaults on its obligations under the visibility

Notices of Final Rulemaking

regulations, EPA may act in place of the State pursuant to a FIP under section 110(c) of the Act, 42 U.S.C. 7410(c)<sup>2</sup>, and promulgate such limitation and measures as are required to achieve reasonable progress.” (Ibid. at 50173, footnote not included). Although ADEQ is listing these costs for information purposes, ADEQ is not attributing any costs to install and operate BART to this rule because such requirements can be imposed by the federal government without any state rule.

**Benefits.** Two kinds of benefits are associated with this rule. The first benefit is derived from reduced emissions. Although, BART could be required to be installed on sources even without this state rule, it is helpful to list the emission benefits. When BART is installed, visibility is improved. Over four million recreation visits were made to Grand Canyon National Park in FY 2001. These visits generate substantial revenue in and for the state of Arizona. Other scenic resources could also be improved with the installation of BART, and, though less significant than the Grand Canyon, would enhance the tourism resources of Arizona, as well as the quality of life for Arizona citizens. In addition, reduction of visibility-impairing emissions also has health benefits.

The second benefit is through the replacement of federal regulation with state regulation. The lack of state regulations implementing BART results in Arizona sources being subject to federal regulation implemented by EPA from Washington and San Francisco, headquarters for EPA’s Region IX. These rules place the identification and analysis of BART sources with ADEQ rather than with EPA. Arizona is currently under a visibility Federal Implementation Plan (FIP), and one or two Arizona sources have considered or implemented technology similar to BART under federal rules. Because ADEQ already permits many of these sources, ADEQ will be more familiar with the various factors that go into the BART analysis. This would be a benefit to sources being regulated. ADEQ would be implementing the same BART rules that EPA does, with a resulting increase in costs for ADEQ and a decrease in costs for EPA.

This final rule further allows ADEQ to proceed with the implementation of the entire federal rule for visibility improvement. The rule addresses the requirements of 40 C.F.R. §§ 51.302 – 51.307. These sections must be satisfied before ADEQ can implement the requirements of 40 C.F.R. §§ 51.308 and 51.309. The plan to implement Section 309 must be submitted to EPA by December 31, 2003.

**D. Small Business Analysis**

A.R.S. § 41-1055(B)(5) requires agencies to state the probable impact of a rulemaking on small businesses. A.R.S. § 41-1035 requires agencies to reduce the impact of a rule on small businesses by using certain methods when they are legal and feasible in meeting the statutory objectives for the rulemaking. These methods include: (1) exempting them from any or all rule requirements, (2) establishing performance standards which would replace any design or operational standards, or (3) instituting reduced compliance or reporting requirements. An agency may accomplish the third method by establishing less stringent requirements, consolidating or simplifying requirements, or setting less stringent schedules or deadlines.

“Small business” is defined in A.R.S. § 41-1001 as “a concern, including its affiliates, which is independently owned and operated, which is not dominant in its field and which employs fewer than one hundred full-time employees or which had gross annual receipts of less than four million dollars in its last fiscal year.” Interpreting this definition means that if a concern has annual gross receipts of more than four million dollars, but fewer than 100 employees, it would not be classified as a small business.

ADEQ expects that none of the potential BART eligible sources will be classified as a small business. ADEQ’s conclusion is that this rule will not impact small business sources. However, if a BART eligible source would qualify as a small business, under federal rule, ADEQ could not establish different requirements for these small business sources. If there are any small businesses that sell, install, or maintain BART-related technology, they will benefit from this rule.

In the preliminary EIS, ADEQ requested comment and additional information relating to any of the conclusions reached above and did not receive any.

**10. A description of the changes between the proposed rules, including supplemental notices, and final rules (if applicable):**

Changes were made with the cooperation of G.R.R.C. Staff to improve the clarity, conciseness and understandability of the rule. The changes are shown below:

A new definition was placed at R18-2-101(71), to clarify a term used in the proposed definition of “visibility impairment” at R18-2-101(123):

71. “Natural conditions” includes naturally occurring phenomena that reduce visibility as measured in terms of light extinction, visual range, contrast, or coloration.

In addition, the word “and” was removed from the definition of “visibility impairment,” as shown:

~~123-124.~~ “Visibility impairment” means any humanly perceptible change in visibility (light extinction, visual range, contrast, ~~and~~ coloration) from that which would have existed under natural conditions.

Both definitions are copied exactly from federal regulations at 40 CFR 51.308.

*Arizona Administrative Register / Secretary of State*  
**Notices of Final Rulemaking**

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In addition, new Article 16 was amended as follows:

**ARTICLE 16. VISIBILITY; REGIONAL HAZE**

**R18-2-1601. Definitions**

In addition to the definitions contained in Articles 1 and 4 of this Chapter and A.R.S. § 49-401.01, the following definitions apply to this Article:

1. "Best available retrofit technology (BART)" means an emission limitation based on the degree of reduction achievable through the application of the best system of continuous emission reduction for each pollutant ~~that is~~ emitted by an existing stationary facility. The emission limitation is established on a case-by-case basis ~~in accordance with~~ under R18-2-1605.
2. "Existing stationary facility" means any of the following stationary sources of air pollutants, including any reconstructed source, which was not in operation ~~prior to~~ before August 7, 1962, and was in existence on August 7, 1977, and has the potential to emit 250 tons per year or more of any air pollutant. ~~In determining A person who determines potential to emit; shall count fugitive emissions; to the extent quantifiable; must be counted.~~
  - a. Fossil-fuel fired steam electric plants of more than 250 million British thermal units per hour heat input;₂
  - b. Coal cleaning plants (thermal dryers);₂
  - c. Kraft pulp mills;₂
  - d. Portland cement plants;₂
  - e. Primary zinc smelters;₂
  - f. Iron and steel mill plants;₂
  - g. Primary aluminum ore reduction plants;₂
  - h. Primary copper smelters;₂
  - i. Municipal incinerators capable of charging more than 250 tons of refuse per day;₂
  - j. Hydrofluoric, sulfuric, and nitric acid plants;₂
  - k. Petroleum refineries;₂
  - l. Lime plants;₂
  - m. Phosphate rock processing plants;₂
  - n. Coke oven batteries;₂
  - o. Sulfur recovery plants;₂
  - p. Carbon black plants (furnace process);₂
  - q. Primary lead smelters;₂
  - r. Fuel conversion plants;₂
  - s. Sintering plants;₂
  - t. Secondary metal production facilities;₂
  - u. Chemical process plants;₂
  - v. Fossil-fuel boilers of more than 250 million British thermal units per hour heat input;₂
  - w. Petroleum storage and transfer facilities with a capacity exceeding 300,000 barrels;₂
  - x. Taconite ore processing facilities;₂
  - y. Glass fiber processing plants;₂ and
  - z. Charcoal production facilities.
3. "Federal Land Manager" means the Secretary of the department, or the Secretary's designee, with authority over the Federal Class I area.
4. "Mandatory Federal Class I Area" means any area identified in 40 CFR §§ 81.400-81.436.
5. "Reasonably attributable" means ascribable by visual observation or other techniques ~~the Director deems appropriate described in R18-2-1604.~~
6. "Reasonably attributable visibility impairment" means visibility impairment that is caused by the emission of air pollutants from one source, or a small group of sources.

**R18-2-1602. Applicability**

This Article applies to any existing stationary source located in the state that may reasonably be anticipated to cause or contribute to visibility impairment in any mandatory Federal Class I area identified in 40 CFR §§ 81.401-81.436. Mandatory Federal Class I areas within Arizona are: Chiricahua National Monument Wilderness, Chiricahua Wilderness, Galiuro Wilderness, Grand Canyon National Park, Mazatzal Wilderness, Mount Baldy Wilderness, Petrified Forest National Park, Pine Mountain Wilderness, Saguaro Wilderness, Sierra Ancha Wilderness, Superstition Wilderness, and Sycamore Canyon Wilderness.

**R18-2-1603. Certification of Impairment**

**A.** A Federal Land Manager with authority over a mandatory Federal Class I area may certify to the Director, at any time, that ~~there exists a~~ reasonably attributable visibility impairment ~~exists in the~~ a mandatory Federal Class I area. The Director may also certify that ~~there exists~~ reasonably attributable visibility impairment ~~exists~~ in any mandatory Federal Class I area ~~as necessary~~ to assure reasonable progress under section 169A(b)(2) of the Clean Air Act.

Notices of Final Rulemaking

B. Documentation ~~from the affected Federal Land Manager or Director~~ that supports the Federal Land Manager or Director's certification shall include:

1. The mandatory Federal Class I area for which visibility impairment is being certified,
2. Any information documenting the basis for the certification of impairment.

**R18-2-1604. Attribution Analysis; Finding**

A. ~~Upon certification of reasonably attributable visibility impairment in any mandatory Federal Class I area~~ If a mandatory Federal Class I area is certified as having reasonably attributable visibility impairment, the Director shall conduct an attribution analysis to identify each existing stationary source that may be reasonably anticipated to cause or contribute to visibility impairment. The Director shall notify the Federal Land Manager, affected source or small group of sources, and local air pollution control officer of the intent to conduct an attribution analysis. The attribution analysis shall be based on the following:

1. Monitoring information obtained through the Arizona Class I Visibility Monitoring Network or special studies approved by ADEQ to ascertain:
  - a. The times visibility impairment occurred, and
  - b. The pollutants contributing to the visibility impairment;
2. Transport analysis or air quality modeling based upon meteorological records to ascertain whether the pollutants were transported to the mandatory Federal Class I area;
3. Other available studies, modeling analyses, and emissions inventories of point, area, and mobile source emissions to ascertain:
  - a. The pollutant ~~or pollutants~~ causing the impairment, and
  - b. The source, or a small group of sources, emitting the ~~impairing pollutant; or pollutants.~~
4. Other relevant supporting documentation provided by the Federal Land Manager or Director used to make the draft attribution analysis finding; and
5. Consideration of any documentation provided by the source, ~~or a small group of sources,~~ or other interested parties.

B. In conducting the attribution analysis, the Director shall use monitoring information, meteorological records, and emissions inventories that represent times and locations reasonably concurrent with the visibility impairment.

C. The Director shall issue a draft attribution finding that impairment has or has not occurred, and provide public notice of the draft attribution finding. The Director shall publish notice of the draft attribution finding in a newspaper of general circulation in each county containing the mandatory Federal Class I area and the affected source. The Director shall provide at least 30 days from the date of the notice for public comment. Written comments to the Director shall include the name of the person and the person's agent or attorney, if any, and shall clearly set forth reasons why the Director should review the draft attribution finding should be reviewed. ~~The Director shall issue a final attribution finding shall be issued after the public comment period.~~ If the Director finds existing stationary sources found to cause or contribute to visibility impairment in a mandatory Federal Class I area, the source shall be subject to a BART Control Analysis under R18-2-1605.

**R18-2-1605. BART Control Analysis; Finding**

A. The Director shall analyze for BART controls each existing stationary source for which a final attribution finding is made under R18-2-1604(C). The Director shall consider the following factors:

1. Available control technology;
2. New source performance standards (NSPS) ~~as adopted~~ in Article 9;
3. Alternative control systems if retrofitting to comply with applicable NSPS standards ~~adopted~~ in Article 9 is ~~found~~ infeasible;
4. Cost of compliance;
5. Energy and non-air quality environmental impacts of compliance;
6. Existing pollution control technology in use at the source or small group of sources;
7. Remaining useful life of the source or small group of sources;
8. Net environmental impact associated with the proposed emission control system;
9. Economic impacts associated with installing and operating the proposed emission control system; and
10. Degree of improvement in visibility anticipated to result from application of the proposed emission control system.

B. The Director shall issue a draft BART finding, and provide public notice of the draft BART finding. The Director shall publish notice of the draft BART finding in a newspaper of general circulation in each county containing the mandatory Federal Class I area and the affected source. The Director shall provide at least 30 days from the date of the notice for public comment. Written comments to the Director shall include the name of the person and the person's agent or attorney, and shall clearly set forth reasons why the Director should review the draft BART finding should be reviewed. The Director shall issue a final BART finding after the public comment period.

1. The Director shall submit each final BART finding ~~that an existing stationary source is required to meet BART to the Administrator as a revision to the state implementation plan (SIP).~~

Notices of Final Rulemaking

2. The Director shall require that each existing stationary source meet BART as expeditiously as practicable but in no case later than five years after EPA approval of the ~~revision to Arizona's State Implementation Plan~~ SIP revision.
- C. If the Director determines that technological or economic limitations on the applicability of measurement methodology to a particular existing stationary source would make the imposition of an emission standard infeasible, the Director may, as part of the finding under subsection (B), ~~instead prescribe a design, equipment, work practice, or other operational standard, or combination thereof of design, equipment, work practice, or operational standard. Such~~ The standard, to the degree possible, ~~is to~~ shall set forth the emission reduction to be achieved by implementation of ~~such~~ the design, equipment, work practice, or operation, and ~~must~~ shall provide for compliance by means ~~which that~~ achieve equivalent results.
- D. The Director shall make a finding that the attributable source ~~has satisfied~~ satisfies the BART requirement if the attributable source ~~has~~:
  1. Voluntarily ~~applied~~ applies best available retrofit technology;
  2. Previously applied emission control standards equivalent to BART; or
  3. ~~Agreed~~ Agrees to shutdown or curtail operations at the attributable source within ~~5~~ five years of the finding. An attributable source that does not shutdown or curtail operations shall ~~proceed to~~ meet BART as expeditiously as practicable, but in no case later than five years after EPA's approval of the revision to ~~Arizona's State Implementation Plan~~ the SIP.
- E. If the Director determines that the imposition of BART or a standard ~~pursuant to~~ under subsection (C) ~~of this section is not feasible~~ infeasible at the time of the finding, the Director shall require the attributable source ~~shall be required~~ to install and operate BART ~~upon a determination by the Director~~ at a later date when the Director determines that BART or equivalent controls are ~~now~~ feasible.
- F. The Director shall provide for a BART control analysis of any existing stationary source that might cause or contribute to impairment of visibility in any mandatory Federal Class I area identified under this Article at such times; ~~as determined by the Administrator;~~ determines new control technology for ~~control of~~ the pollutant becomes reasonably available if:
  1. The pollutant is emitted by that existing stationary source,
  2. Controls representing BART for the pollutant have not previously been required under this Article, and
  3. The impairment of visibility in any mandatory Federal Class I area is reasonably attributable to the emissions of that pollutant.

**R18-2-1606. Exemption from BART**

Any existing stationary source required to install, operate, and maintain BART ~~pursuant to~~ under this Article, may apply to the Administrator for an exemption from that requirement according to 40 CFR 51.303, ~~by obtaining prior written concurrence from the Director according to 40 CFR 51.303.~~ The existing stationary source shall obtain the Director's written concurrence before sending the application for exemption to the Administrator.

**11. A summary of the comments made regarding the rules and the agency response to them:**

ADEQ received one written comment. It expressed general support for the rules and for protecting visibility in Arizona's Class I parks and wilderness areas.

**Comment:** ADEQ received an oral comment that the word "facility" should be replaced by "source" in the definitions of "best available retrofit technology" and "existing stationary facility" to be consistent with the rest of the rule.

**Response:** ADEQ has kept these definitions the same as the federal definitions to ensure consistency. The definitions use the term "source" to define the terms, and "source" is used thereafter in the rules. ADEQ is not aware of any inconsistency.

**12. Any other matters prescribed by statute that are applicable to the specific agency or to any specific rule or class of rules:**

Not applicable

**13. Incorporations by reference and their location in the rules:**

Not applicable

**14. Were these rules previously adopted as emergency rules?**

No

**15. The full text of the rules follows:**

**TITLE 18. ENVIRONMENTAL QUALITY**

**CHAPTER 2. DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR POLLUTION CONTROL**

Notices of Final Rulemaking

ARTICLE 1. GENERAL

Section  
R18-2-101. Definitions

**ARTICLE 16. VISIBILITY; REGIONAL HAZE**

Section  
R18-2-1601. Definitions  
R18-2-1602. Applicability  
R18-2-1603. Certification of Impairment  
R18-2-1604. Attribution Analysis: Finding  
R18-2-1605. BART Control Analysis: Finding  
R18-2-1606. Exemption from BART

ARTICLE 1. GENERAL

**R18-2-101. Definitions**

In addition to the definitions prescribed in A.R.S. §§ 49-101, 49-401.01, 49-421, 49-471, and 49-541, in this Chapter, unless otherwise specified:

1. No change
2. No change
  - a. No change
  - b. No change
  - c. No change
  - d. No change
  - e. No change
3. No change
4. No change
5. No change
6. No change
7. No change
8. No change
9. No change
10. No change
  - a. No change
  - b. No change
  - c. No change
  - d. No change
  - e. No change
  - f. No change
11. No change
  - a. No change
  - b. No change
  - c. No change
12. No change
13. No change
14. No change
  - a. No change
  - b. No change
15. No change
16. No change
17. No change
18. No change
19. No change
20. No change
21. No change
22. No change
23. No change
24. No change
25. No change
26. No change

Notices of Final Rulemaking

- 27. No change
  - a. No change
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- 28. No change
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- 40. No change
- 41. No change
- 42. No change
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- 45. No change
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  - i. No change
  - j. No change

Notices of Final Rulemaking

- 58. No change
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- 62. No change
- 63. No change
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    - vi. No change
    - vii. No change
    - viii. No change
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    - ix. No change
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    - x. No change
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- 64. No change
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  - b. No change
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    - ii. No change
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    - xviii. No change
    - xix. No change
    - xx. No change
    - xxi. No change
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    - xxiii. No change
    - xxiv. No change
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    - xxvi. No change
    - xxvii. No change

Notices of Final Rulemaking

65. No change

66. No change

67. No change

68. No change

69. No change

70. No change

71. "Natural conditions" includes naturally occurring phenomena that reduce visibility as measured in terms of light extinction, visual range, contrast, or coloration.

~~71-72.~~No change

~~72-73.~~No change

a. No change

i. No change

ii. No change

b. No change

i. No change

ii. No change

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iv. No change

g. No change

~~73-74.~~No change

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~~95-96.~~No change

~~96-97.~~No change

~~97-98.~~No change

a. No change

Notices of Final Rulemaking

- b. No change
- c. No change
- d. No change
- e. No change
- ~~98-99~~.No change
  - a. No change
    - i. No change
    - ii. No change
    - iii. No change
    - iv. No change
    - v. No change
    - vi. No change
    - vii. No change
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  - c. No change
- ~~99-100~~.No change
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  - b. No change
- ~~100-101~~.No change
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- ~~102-103~~.No change
- ~~103-104~~.No change
- ~~104-105~~.No change
  - a. No change
  - b. No change
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  - d. No change
- ~~105-106~~.No change
- ~~106-107~~.No change
- ~~107-108~~.No change
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- ~~117-118~~.No change
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  - f. No change
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  - m. No change
  - n. No change
  - o. No change
  - p. No change
  - q. No change

Notices of Final Rulemaking

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- x. No change
- y. No change
- z. No change
- aa. No change
- bb. No change
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- rr. No change
- ss. No change
- tt. No change
- uu. No change
- vv. No change
- ww.No change
- xx. No change
- ~~118.119.~~No change
- ~~119.120.~~No change
- ~~120.121.~~No change
- ~~121.122.~~No change
- ~~122.123.~~No change
- ~~123.124.~~“Visibility impairment” means any humanly perceptible change in visibility (light extinction, visual range, contrast, coloration) from that which would have existed under natural conditions.
- ~~124.125.~~No change
- ~~125.126.~~No change
- a. No change
- b. No change
- c. No change
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Notices of Final Rulemaking

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- z. No change
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- oo. No change
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- qq. No change
- rr. No change
- ss. No change
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  - iv. No change
- ~~126-127.~~No change

**ARTICLE 16. VISIBILITY; REGIONAL HAZE**

**R18-2-1601. Definitions**

In addition to the definitions contained in Articles 1 and 4 of this Chapter and A.R.S. § 49-401.01, the following definitions apply to this Article:

1. “Best available retrofit technology (BART)” means an emission limitation based on the degree of reduction achievable through the application of the best system of continuous emission reduction for each pollutant emitted by an existing stationary facility. The emission limitation is established on a case-by-case basis under R18-2-1605.
2. “Existing stationary facility” means any of the following stationary sources of air pollutants, including any reconstructed source, which was not in operation before August 7, 1962, and was in existence on August 7, 1977, and has the potential to emit 250 tons per year or more of any air pollutant. A person who determines potential to emit shall count fugitive emissions to the extent quantifiable.
  - a. Fossil-fuel fired steam electric plants of more than 250 million British thermal units per hour heat input;
  - b. Coal cleaning plants (thermal dryers);
  - c. Kraft pulp mills;
  - d. Portland cement plants;
  - e. Primary zinc smelters;
  - f. Iron and steel mill plants;
  - g. Primary aluminum ore reduction plants;
  - h. Primary copper smelters;
  - i. Municipal incinerators capable of charging more than 250 tons of refuse per day;
  - j. Hydrofluoric, sulfuric, and nitric acid plants;
  - k. Petroleum refineries;
  - l. Lime plants;
  - m. Phosphate rock processing plants;
  - n. Coke oven batteries;

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**Notices of Final Rulemaking**

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- o. Sulfur recovery plants;
  - p. Carbon black plants (furnace process);
  - q. Primary lead smelters;
  - r. Fuel conversion plants;
  - s. Sintering plants;
  - t. Secondary metal production facilities;
  - u. Chemical process plants;
  - v. Fossil-fuel boilers of more than 250 million British thermal units per hour heat input;
  - w. Petroleum storage and transfer facilities with a capacity exceeding 300,000 barrels;
  - x. Taconite ore processing facilities;
  - y. Glass fiber processing plants; and
  - z. Charcoal production facilities.
3. “Federal Land Manager” means the secretary of the department, or the secretary’s designee, with authority over the Federal Class I area.
4. “Mandatory Federal Class I Area” means any area identified in 40 CFR 81.400 through 81.436.
5. “Reasonably attributable” means ascribable by visual observation or other techniques described in R18-2-1604.
6. “Reasonably attributable visibility impairment” means visibility impairment that is caused by the emission of air pollutants from one source, or a small group of sources.

**R18-2-1602. Applicability**

This Article applies to any existing stationary source located in the state that may reasonably be anticipated to cause or contribute to visibility impairment in any mandatory Federal Class I area identified in 40 CFR 81.401 through 81.436. Mandatory Federal Class I areas within Arizona are: Chiricahua National Monument Wilderness, Chiricahua Wilderness, Galiuro Wilderness, Grand Canyon National Park, Mazatzal Wilderness, Mount Baldy Wilderness, Petrified Forest National Park, Pine Mountain Wilderness, Saguaro Wilderness, Sierra Ancha Wilderness, Superstition Wilderness, and Sycamore Canyon Wilderness.

**R18-2-1603. Certification of Impairment**

- A.** A Federal Land Manager with authority over a mandatory Federal Class I area may certify to the Director, at any time, that a reasonably attributable visibility impairment exists in a mandatory Federal Class I area. The Director may also certify that reasonably attributable visibility impairment exists in any mandatory Federal Class I area to assure reasonable progress under section 169A(b)(2) of the Clean Air Act.
- B.** Documentation that supports the Federal Land Manager or Director’s certification shall include:
- 1. The mandatory Federal Class I area for which visibility impairment is being certified,
  - 2. Any information documenting the basis for the certification of impairment.

**R18-2-1604. Attribution Analysis; Finding**

- A.** If a mandatory Federal Class I area is certified as having reasonably attributable visibility impairment, the Director shall conduct an attribution analysis to identify each existing stationary source that may be reasonably anticipated to cause or contribute to visibility impairment. The Director shall notify the Federal Land Manager, affected source or small group of sources, and local air pollution control officer of the intent to conduct an attribution analysis. The attribution analysis shall be based on the following:
- 1. Monitoring information obtained through the Arizona Class I Visibility Monitoring Network or special studies approved by ADEQ to ascertain:
    - a. The times visibility impairment occurred, and
    - b. The pollutants contributing to the visibility impairment;
  - 2. Transport analysis or air quality modeling based upon meteorological records to ascertain whether the pollutants were transported to the mandatory Federal Class I area;
  - 3. Other available studies, modeling analyses, and emissions inventories of point, area, and mobile source emissions to ascertain:
    - a. The pollutant causing the impairment, and
    - b. The source, or a small group of sources, emitting the pollutant;
  - 4. Other relevant supporting documentation provided by the Federal Land Manager or Director used to make the draft attribution analysis finding; and
  - 5. Consideration of any documentation provided by the source, a small group of sources, or other interested parties.
- B.** In conducting the attribution analysis, the Director shall use monitoring information, meteorological records, and emissions inventories that represent times and locations reasonably concurrent with the visibility impairment.
- C.** The Director shall issue a draft attribution finding that impairment has or has not occurred, and provide public notice of the draft attribution finding. The Director shall publish notice of the draft attribution finding in a newspaper of general circulation in each county containing the mandatory Federal Class I area and the affected source. The Director shall provide at least 30 days from the date of the notice for public comment. Written comments to the Director shall include the name

Notices of Final Rulemaking

of the person and the person's agent or attorney, if any, and shall clearly set forth reasons why the Director should review the draft attribution finding. The Director shall issue a final attribution finding after the public comment period. If the Director finds existing stationary sources cause or contribute to visibility impairment in a mandatory Federal Class I area, the source shall be subject to a BART Control Analysis under R18-2-1605.

**R18-2-1605. BART Control Analysis; Finding**

- A.** The Director shall analyze for BART controls each existing stationary source for which a final attribution finding is made under R18-2-1604(C). The Director shall consider the following factors:
1. Available control technology;
  2. New source performance standards (NSPS) in Article 9;
  3. Alternative control systems if retrofitting to comply with applicable NSPS standards in Article 9 is infeasible;
  4. Cost of compliance;
  5. Energy and non-air quality environmental impacts of compliance;
  6. Existing pollution control technology in use at the source or small group of sources;
  7. Remaining useful life of the source or small group of sources;
  8. Net environmental impact associated with the proposed emission control system;
  9. Economic impacts associated with installing and operating the proposed emission control system; and
  10. Degree of improvement in visibility anticipated to result from application of the proposed emission control system.
- B.** The Director shall issue a draft BART finding, and provide public notice of the draft BART finding. The Director shall publish notice of the draft BART finding in a newspaper of general circulation in each county containing the mandatory Federal Class I area and the affected source. The Director shall provide at least 30 days from the date of the notice for public comment. Written comments to the Director shall include the name of the person and the person's agent or attorney, and shall clearly set forth reasons why the Director should review the draft BART finding. The Director shall issue a final BART finding after the public comment period.
1. The Director shall submit each final BART finding to the Administrator as a revision to the SIP.
  2. The Director shall require that each existing stationary source meet BART as expeditiously as practicable but in no case later than five years after EPA approval of the SIP revision.
- C.** If the Director determines that technological or economic limitations on the applicability of measurement methodology to a particular existing stationary source would make the imposition of an emission standard infeasible, the Director may, as part of the finding under subsection (B), prescribe a design, equipment, work practice, operational standard, or combination of design, equipment, work practice, or operational standard. The standard, to the degree possible, shall set forth the emission reduction to be achieved by implementation of the design, equipment, work practice, or operation, and shall provide for compliance by means that achieve equivalent results.
- D.** The Director shall make a finding that the attributable source satisfies the BART requirement if the attributable source:
1. Voluntarily applies best available retrofit technology;
  2. Previously applied emission control standards equivalent to BART; or
  3. Agrees to shutdown or curtail operations at the attributable source within five years of the finding. An attributable source that does not shutdown or curtail operations shall meet BART as expeditiously as practicable, but in no case later than five years after EPA's approval of the revision to the SIP.
- E.** If the Director determines that the imposition of BART or a standard under subsection (C) is infeasible at the time of the finding, the Director shall require the attributable source to install and operate BART at a later date when the Director determines that BART or equivalent controls are feasible.
- F.** The Director shall provide for a BART control analysis of any existing stationary source that might cause or contribute to impairment of visibility in any mandatory Federal Class I area identified under this Article at such time as the Administrator determines new control technology for the pollutant becomes reasonably available:
1. The pollutant is emitted by that existing stationary source,
  2. Controls representing BART for the pollutant have not previously been required under this Article, and
  3. The impairment of visibility in any mandatory Federal Class I area is reasonably attributable to the emissions of that pollutant.

**R18-2-1606. Exemption from BART**

Any existing stationary source required to install, operate, and maintain BART under this Article, may apply to the Administrator for an exemption from that requirement according to 40 CFR 51.303. The existing stationary source shall obtain the Director's written concurrence before sending the application for exemption to the Administrator.